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Docket No. F 1845

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
MARIO RIOS) ART UNIT 3683
Serial No. 10/672,031) EXAMINER PAM RODRIGUEZ
Filed: September 26, 2003) DECLARATION OF
For: ENCLOSED SPRING MECHANISM FOR) FERNANDO CALDERON
TRAILER RAMP DOORS)

I, the undersigned, Fernando Calderon, declare:

1. I am an engineer working in the field of designing and supervising the manufacture of apparatus for controlling various movements of doors. My educational background and work experience are as follows:

1. Educational Background. After graduation from high school, I had 4 years of study at Pierce College, Woodland Hills, California. My field of study was engineering course, drafting courses, and technical illustration, from 1982 to 1986.

2. Work Experience. I have had 14 years of work experience at Anthony's Manufacturing Company, San Fernando, California. I began as

1 a draftsman, and worked my way up to being an engineer. Anthony's was
2 a leading manufacturer of refrigeration equipment, and the design of
3 refrigerator doors was an important part of their manufactured
4 equipment.
5

6 At Anthony's, I was in charge of engineering development for a
7 period of 6 years. I then became assistant plant manager for 4 years
8 overseeing production of door products, among others. I also handled
9 customer service calls and developed instructions for servicing
10 doors.
11

12 3. For the past 3 years, I have been and am plant manager at CDS,
13 a manufacturer of door devices, located at 650 Jessie Street, San
14 Fernando, California.
15

16 4. I became and am familiar with making and using devices for
17 controlling the operation of a door and the customary way of showing
18 devices controlling door movement over the past 17 years.
19

20 5. I am a co-inventor of the invention disclosed and claimed in
21 application serial number 10/452,242 entitled APPARATUS FOR
22 CONTROLLING VARIOUS MOVEMENTS OF A DOOR filed in the U.S. Patent and
23 Trademark Office. This application has all of its 17 claims allowed
24 by the assigned examiner and the issue fee has been paid.
25

26 I am informed and believe, and based upon such information and
27 belief, state that the U.S. patent on this invention will be issued
28 at the estimated date of mid-January, 2006.

1 6. I am familiar with the details of the prosecution of this
2 patent application in the U.S. Patent and Trademark Office. During
3 the prosecution, the assigned examiner applied only three patents
4 against claims of this application, Wada et al U.S. Patent No.
5 5,321,870, entitled Torsion Bar Apparatus for Self-Closing Door and
6 Torque Adjusting Device Therefor, Hwang U.S. Patent No. 6,205, 616
7 entitled Pivotal Bearing for Door Frames, and Stein et al., U.S.
8 Patent No. 3,285,324, entitled Bi-fold Hardware for Foldable Doors.
9

10 7. I am familiar with all three of the above identified patents
11 and note that none of them disclose or suggest window frames or
12 automated window closing systems for buildings or concealing a window
13 by its associated frame.
14

15 8. Before the patent application disclosing the invention of
16 which I am a co-inventor was filed, I had reviewed various patents
17 and other prior art relating to apparatus for controlling movements
18 of a door. None of these patents and other prior art disclosed any
19 subject matter relating to window frames or to biasing a window panel
20 by means of a gas spring or concealing a window by a window frame. I
21 did not review or search for patents or prior art relating to window
22 frames or frames adapted to close or conceal windows by biasing gas
23 springs or pistons because such prior art is from a different field
24 of endeavor from my field of apparatus for controlling movements of a
25 door and would not help me in developing the invention for which a
26 patent was sought.
27
28

1 9. I have read and reviewed the patent application Serial Number
2 10/672,931 for ENCLOSED SPRING MECHANISM FOR TRAILER RAMP DOORS,
3 including its drawings and claims as amended. I note that the
4 problems solved by the invention disclosed and claimed in this
5 application are to provide a mechanical spring mechanism which
6 assists the opening and closing of the ramp door and also which is
7 protected from weather elements by being completely enclosed when the
8 ramp door is closed.
9

10 10. I have also read and reviewed the cited U.S. Patent No.
11 5,559,409 to Beierwaltes et al. I note that the Beierwaltes patent
12 was primarily intended to solve the problem of conventional automatic
13 window systems for buildings which use a motor driven scissor
14 mechanism that has little leverage and is subject to breakage by
15 wind. There was no problem or object stated in the Beierwaltes patent
16 to protect a mechanical spring mechanism, which is usually made of
17 metal, from corrosion by weather elements by completely enclosing it.
18

19 11. The problem in the Beierwaltes patent was solved by the use
20 of an actuation system for a window which has gas springs or pistons
21 to bias a window panel outward from a corresponding frame. (See
22 abstract of Beierwaltes patent)
23

24 12. However, I would have no motivation to look to automated
25 window systems using gas springs to bias a window panel outward from
26 a frame to solve a problem of complete enclosure of a mechanical
27 spring mechanism for a ramp door from weather elements.
28

1 13. I note that the Beierwalters patent states, without any
2 illustration or meaningful disclosure, that the gas springs may be
3 mounted in a partially enclosed channel for complete concealment.
4 Without an illustration and a more detailed disclosure of such an
5 arrangement, I would be unable to apply this concept to an
6 application such as the invention of the mechanical spring mechanism
7 disclosed in patent application, serial number 10/672,031 which is
8 completely enclosed when the ramp door is closed and completely
9 protected from weather elements.
10

11
12 14. Further, there is no disclosure in the Beierwaltes patent of
13 complete enclosure of the gas springs or pistons for protection from
14 weather elements but only complete concealment. The Beierwaltes
15 patent specifically states that the problem it seeks to overcome is
16 deficiencies in conventional designs that require recessed access
17 panels for mechanisms substantially hidden from view. (See column 1,
18 lines 26-29). Nowhere does the Beierwaltes patent disclose the need
19 or structures for complete enclosure of its gas springs (or pistons)
20 for protection from weather elements. Concealment does not suggest
21 and is not the equivalent of complete enclosure for protection from
22 weather elements.
23
24

25 15. I have never met, communicated with, or talked to the named
26 inventor, Mario Rios, of the application for patent serial number
27 10/672,031.
28

1 I declare that all statements made herein of my own knowledge are
2 true and that all statements made on information and belief are
3 believed to be true; and further that these statements were made with
4 the knowledge that willful false statements and the like so made are
5 punishable by fine or imprisonment or both, under Section 1001 of
6 Title 18 of the United States Code, and that such willful false
7 statements may jeopardize the validity of the above referenced
8 application or any patent issuing thereon.
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10 DATED: December 15 , 2005

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12 Fernando Calderon
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